## Abstract: A Comparative Effectiveness & Long-term Health Study in Wisconsin Smokers PI: Michael C. Fiore 3-R01-HL-109031-02S1

Smoking remains the greatest cause of preventable morbidity and mortality in the US. About 75% of adult African-American smokers and about 25% of adult European-American smokers in the US smoke menthol cigarettes. While common, little is known about the risks of smoking menthol versus non-menthol cigarettes with regard to tobacco dependence and quitting motivation and success. The proposed research will use the unique resources of the Wisconsin Smokers Health Study (WSHS) to determine the associations of menthol smoking (versus smoking non-menthol cigarettes) with tobacco dependence, occurrence of attempts to quit smoking, and quitting success. The WSHS is a longitudinal study that spans close to 10 years

and comprises 2 comparative effectiveness trials (N's = 1504 & 1050) that together evaluate all major types of smoking cessation pharmacotherapies (i.e., the nicotine patch, the nicotine lozenge, bupropion, varenicline, the nicotine patch+ lozenge, and bupropion +lozenge). The WSHS entails comprehensive assessments of tobacco dependence, participant characteristics, and guitting attempts and success over time. This research will use these data to determine: (1) the relation of menthol-smoking with comprehensive measures of smoking cessation, and whether such relations are stronger for some types of smokers than others (e.g., African-Americans, women); (2) the relation of menthol-smoking with making guit attempts; (3) which types of smoking cessation pharmacotherapies are most effective for menthol-smokers, and whether menthol and non-menthol smokers differ significantly in response to pharmacotherapies: (4) the causal mechanisms that account for menthol smokers being at a different risk of smoking cessation failure (if they are found to be so) and whether pharamacotherapies work via the same mechanisms in menthol- and non-menthol smokers; and (5) the relation of menthol-smoking with important participant characteristics such as severity and type of tobacco dependence. This research will compare menthol-smoking versus non-menthol smoking with regard to tobacco dependence and guitting success. The results should be highly relevant to decisions regarding public health policy and the regulation of menthol cigarettes.